



May 26, 2017

Public Health Preparedness and Situational Awareness Report: #2017:20 Reporting for the week ending 5/20/17 (MMWR Week #20)

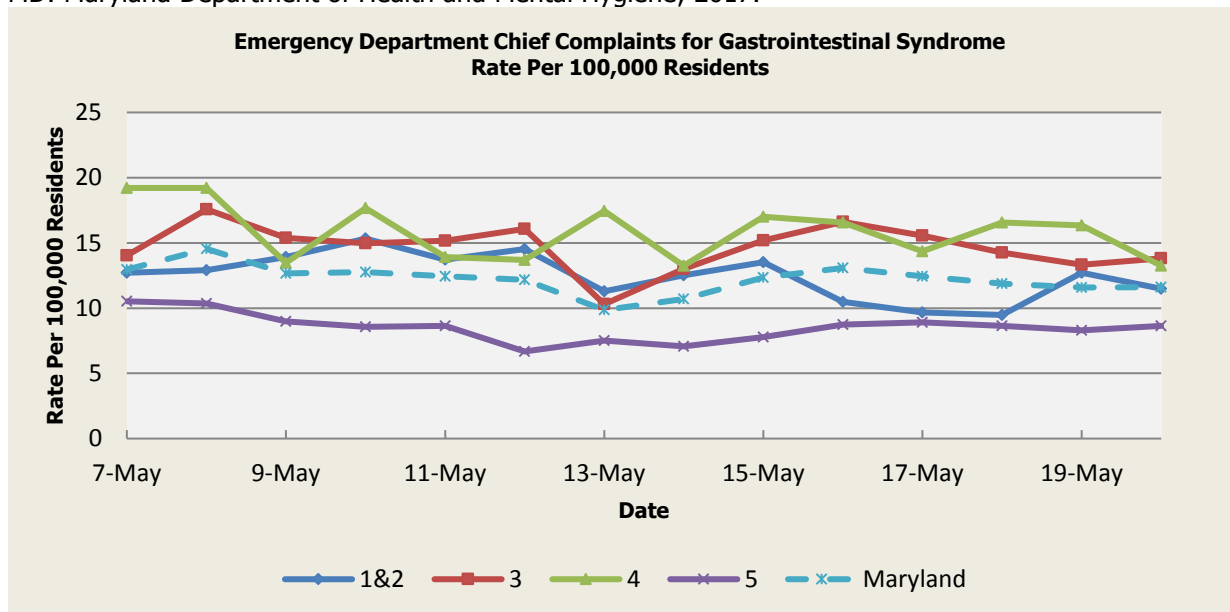
CURRENT HOMELAND SECURITY THREAT LEVELS

National: No Active Alerts

Maryland: Level Four (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

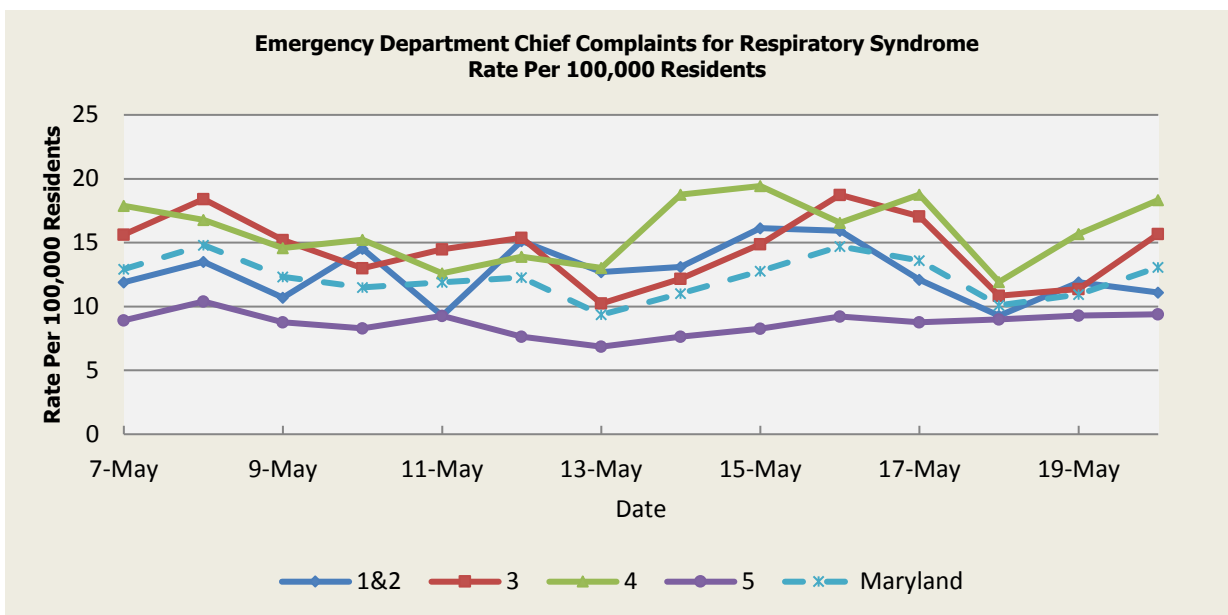
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics): Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census. Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE). Baltimore, MD: Maryland Department of Health and Mental Hygiene; 2017.



There were no Gastrointestinal Syndrome outbreak reported this week.

Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	12.81	14.99	15.31	10.22	13.01
Median Rate*	12.91	14.80	15.02	10.22	12.95

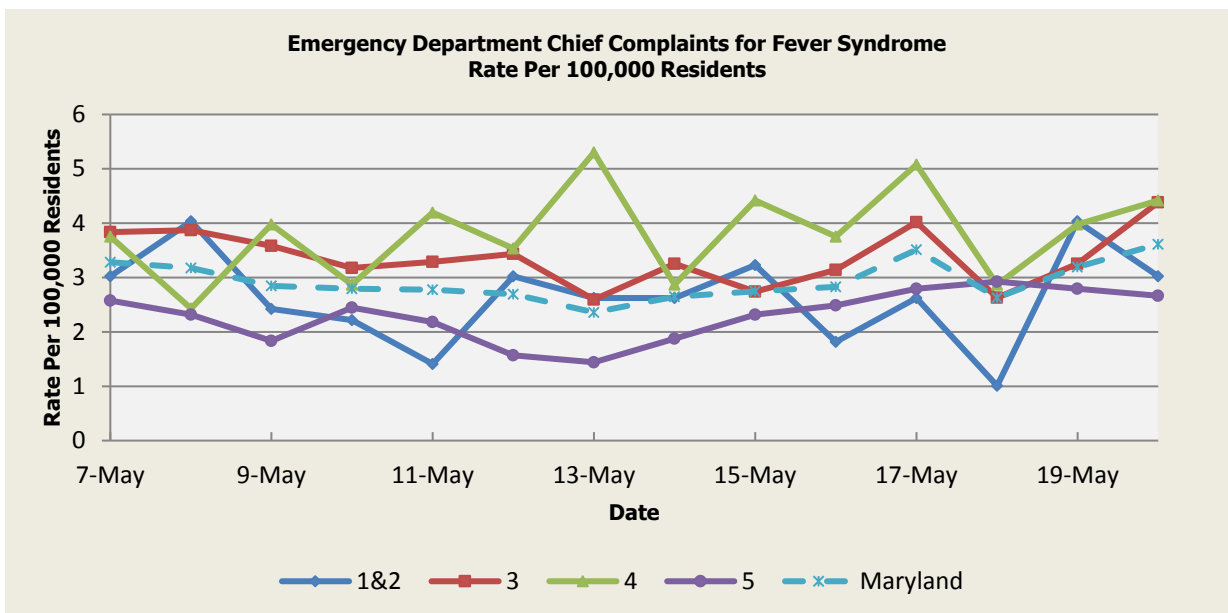
* Per 100,000 Residents



There was one (1) Respiratory Syndrome outbreaks reported this week: one (1) outbreak of Legionellosis in a Nursing Home (Region 3).

Respiratory Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	11.96	14.34	14.24	9.89	12.43
Median Rate*	11.70	13.88	13.91	9.65	12.05

* Per 100,000 Residents

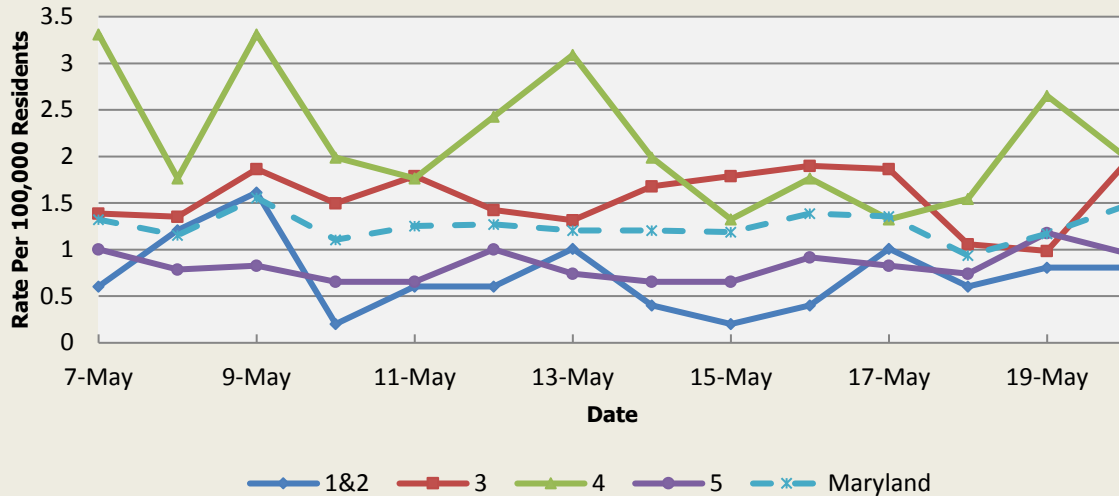


There were no Fever Syndrome outbreaks reported this week.

Fever Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.00	3.84	3.95	3.06	3.48
Median Rate*	2.82	3.76	3.75	2.97	3.40

Per 100,000 Residents

Emergency Department Chief Complaints for Localized Lesion Syndrome Rate Per 100,000 Residents



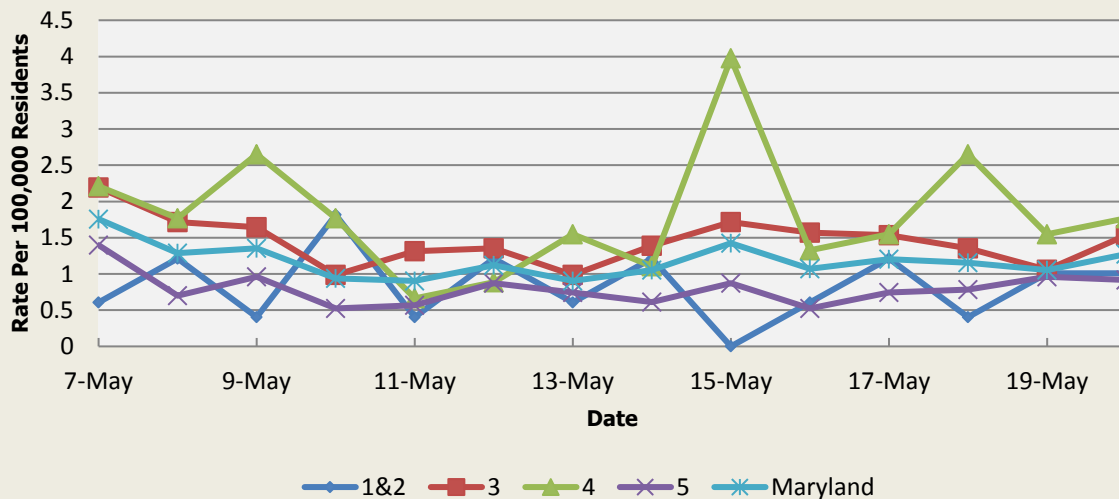
There were no Localized Lesion Syndrome outbreaks reported this week.

Localized Lesion Syndrome Baseline Data January 1, 2010 - Present

Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.04	1.88	2.01	0.95	1.46
Median Rate*	1.01	1.83	1.99	0.92	1.42

* Per 100,000 Residents

Emergency Department Chief Complaints for Rash Syndrome Rate Per 100,000 Residents



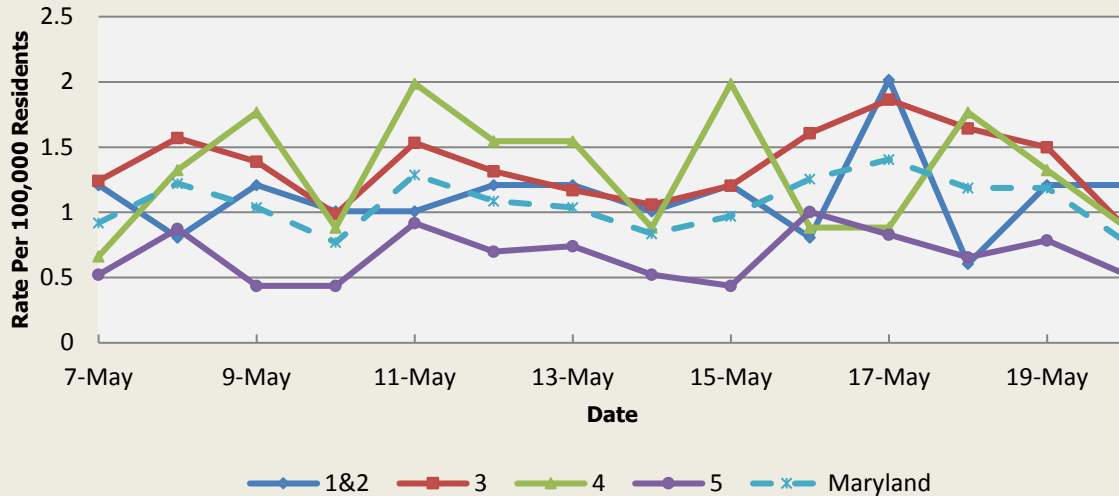
There was one (1) Rash Syndrome outbreak reported this week: one (1) outbreak of Scabies in a Nursing Home (Region 3).

Rash Syndrome Baseline Data January 1, 2010 - Present

Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.24	1.74	1.76	1.02	1.42
Median Rate*	1.21	1.68	1.77	1.00	1.39

* Per 100,000 Residents

Emergency Department Chief Complaints for Neurological Syndrome Rate Per 100,000 Residents



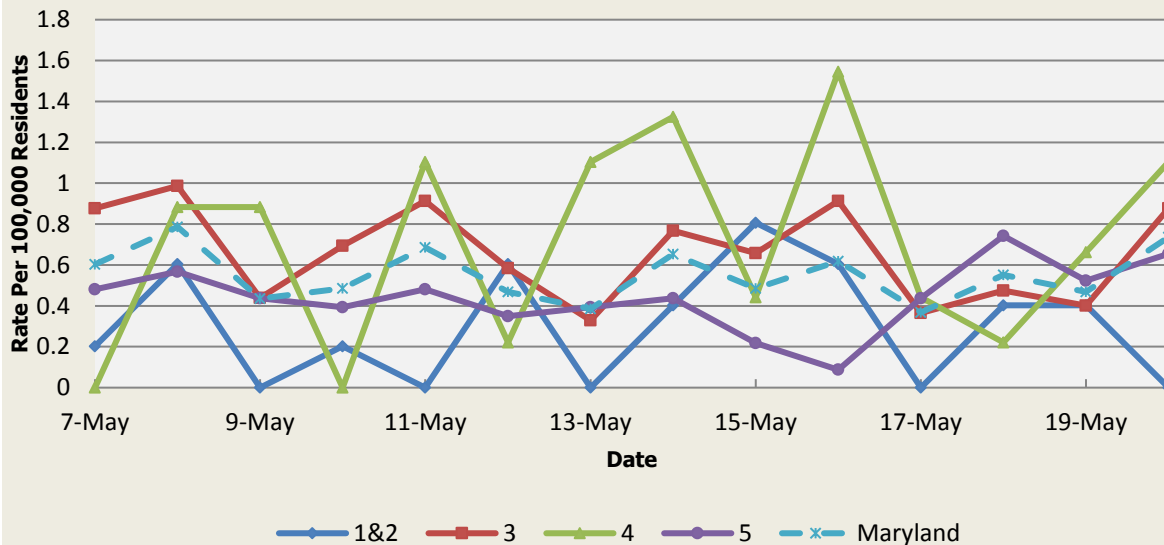
There were no Neurological Syndrome outbreaks reported this week.

Neurological Syndrome Baseline Data January 1, 2010 - Present

Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.65	0.79	0.68	0.50	0.66
Median Rate*	0.60	0.69	0.66	0.48	0.59

* Per 100,000 Residents

Emergency Department Chief Complaints for Severe Illness or Death Syndrome Rate Per 100,000 Residents



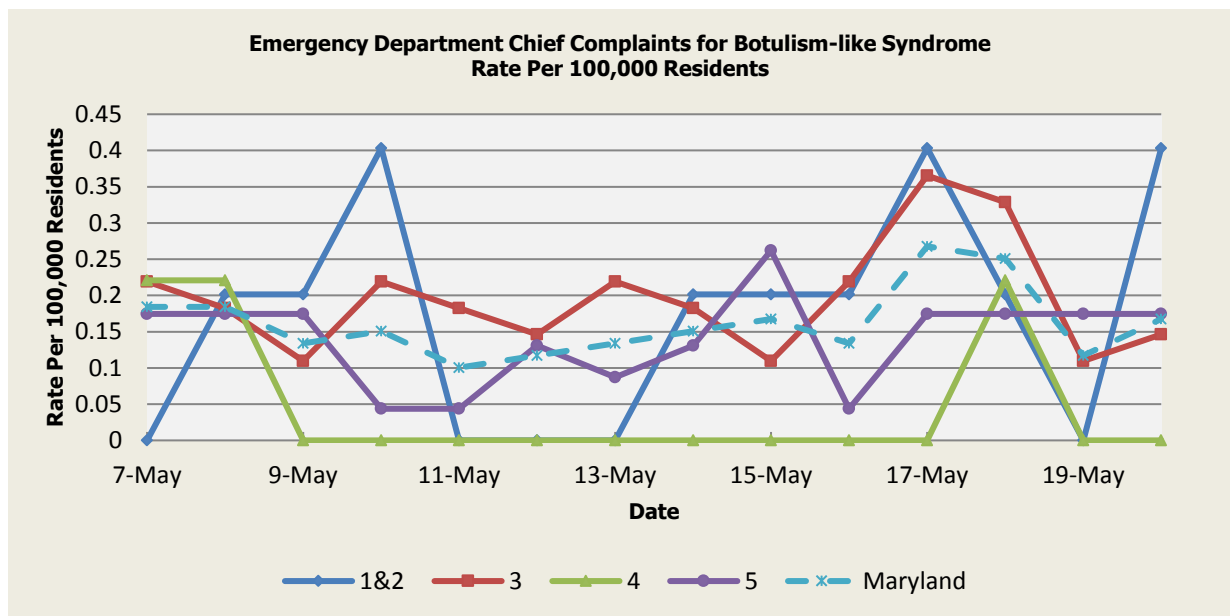
There were no Severe Illness or Death Syndrome outbreaks reported this week.

Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present

Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.64	0.91	0.80	0.46	0.71
Median Rate*	0.60	0.91	0.66	0.44	0.70

* Per 100,000 Residents

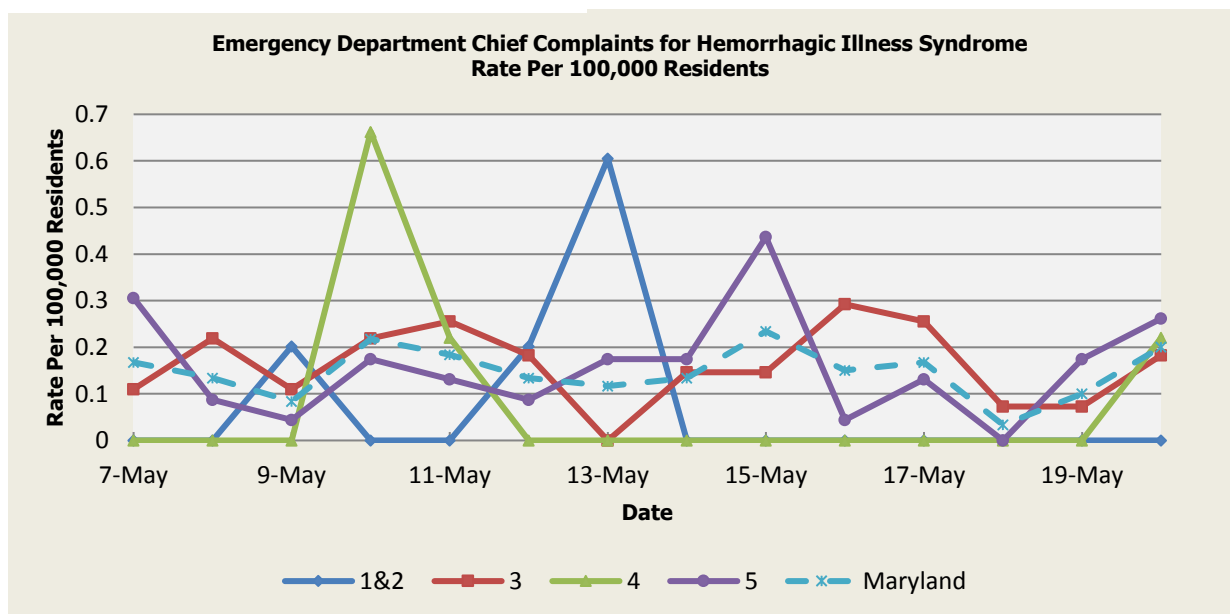
SYNDROMES RELATED TO CATEGORY A AGENTS



There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 05/07 (Regions 3,4,5), 05/08 (Regions 1&2,3,4,5), 05/09 (Regions 1&2,5), 05/10 (Regions 1&2,3), 05/11 (Region 3), 05/12 (Region 5), 05/13 (Region 3), 05/14 (Regions 1&2,3,5), 05/15 (Regions 1&2,5), 05/16 (Regions 1&2,3), 05/17 (Regions 1&2,3,5), 05/18 (Regions 1&2,3,4,5), 05/19 (Region 5), 05/20 (Regions 1&2,5). These increases are not known to be associated with any outbreaks.

Botulism-like Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.06	0.09	0.04	0.06	0.07
Median Rate*	0.00	0.07	0.00	0.04	0.05

* Per 100,000 Residents

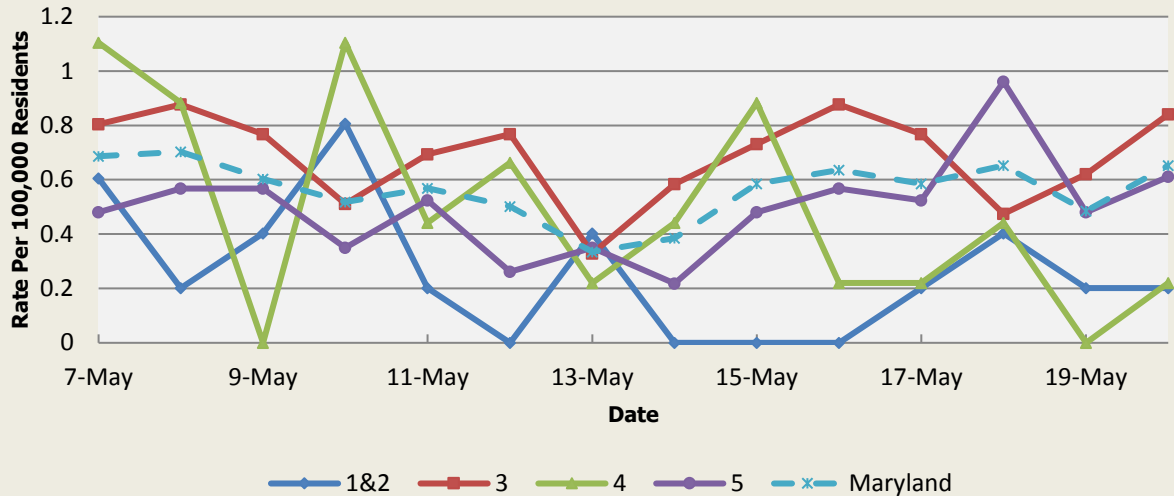


There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 05/07 (Region 5), 05/09 (Regions 1&2), 05/10 (Region 4), 05/11 (Region 4), 05/12 (Regions 1&2), 05/13 (Regions 1&2), 05/15 (Region 5), 05/16 (Region 3), 05/20 (Regions 4,5). These increases are not known to be associated with any outbreaks.

Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.03	0.13	0.03	0.09	0.10
Median Rate*	0.00	0.04	0.00	0.04	0.05

* Per 100,000 Residents

**Emergency Department Chief Complaints for Lymphadenitis Syndrome
Rate Per 100,000 Residents**



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 05/08 (Region 4), 05/10 (Regions 1&2), 05/15 (Region 4). These increases are not known to be associated with any outbreaks.

**Lymphadenitis Syndrome Baseline Data
January 1, 2010 - Present**

Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.31	0.52	0.35	0.32	0.41
Median Rate*	0.20	0.40	0.22	0.26	0.33

* Per 100,000 Residents

MARYLAND REPORTABLE DISEASE SURVEILLANCE

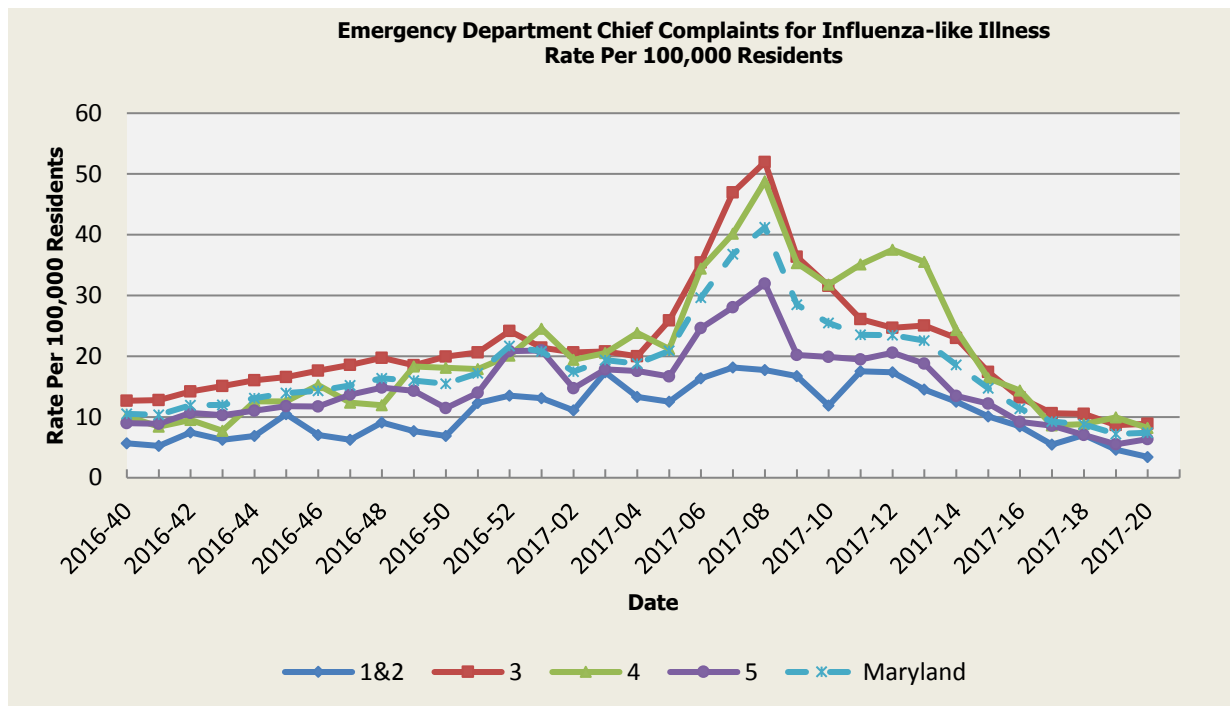
Condition	Counts of Reported Cases†					
	May			Cumulative (Year to Date)**		
Vaccine-Preventable Diseases	2017	Mean*	Median*	2017	Mean*	Median*
Aseptic meningitis	9	22.8	22	89	140.6	140
Meningococcal disease	0	0.2	0	2	3	2
Measles	0	0.2	0	1	2.8	1
Mumps	0	3.2	3	15	30.6	7
Rubella	0	0.4	0	1	2.4	2
Pertussis	8	17.2	17	79	115.4	110
Foodborne Diseases	2017	Mean*	Median*	2017	Mean*	Median*
Salmonellosis	26	47.4	41	200	246.2	235
Shigellosis	10	10.8	7	75	73	82
Campylobacteriosis	31	43.2	39	227	228	224
Shiga toxin-producing Escherichia coli (STEC)	10	8.4	8	48	41.2	35
Listeriosis	0	0.8	0	8	3.6	4
Arboviral Diseases	2017	Mean*	Median*	2017	Mean*	Median*
West Nile Fever	0	0.4	0	0	1	0
Lyme Disease	135	163.4	152	814	724.4	633
Emerging Infectious Diseases	2017	Mean*	Median*	2017	Mean*	Median*
Chikungunya	0	0	0	0	1.6	0
Dengue Fever	0	1.4	1	4	9.4	8
Zika Virus***	0	1	1	1	4.2	2
Other	2017	Mean*	Median*	2017	Mean*	Median*
Legionellosis	12	10.8	12	59	47.2	47

NEDSS data: Maryland National Electronic Disease Surveillance System (NEDSS). Baltimore, MD: Maryland Department of Health and Mental Hygiene; 2017. † Counts are subject to change *Timeframe of 2011-2017**Includes January through current month.

*** As of May 25, 2017, the total [Maryland Confirmed and Probable Cases of Zika Virus Disease and Infection](#) for 2017 is 27.

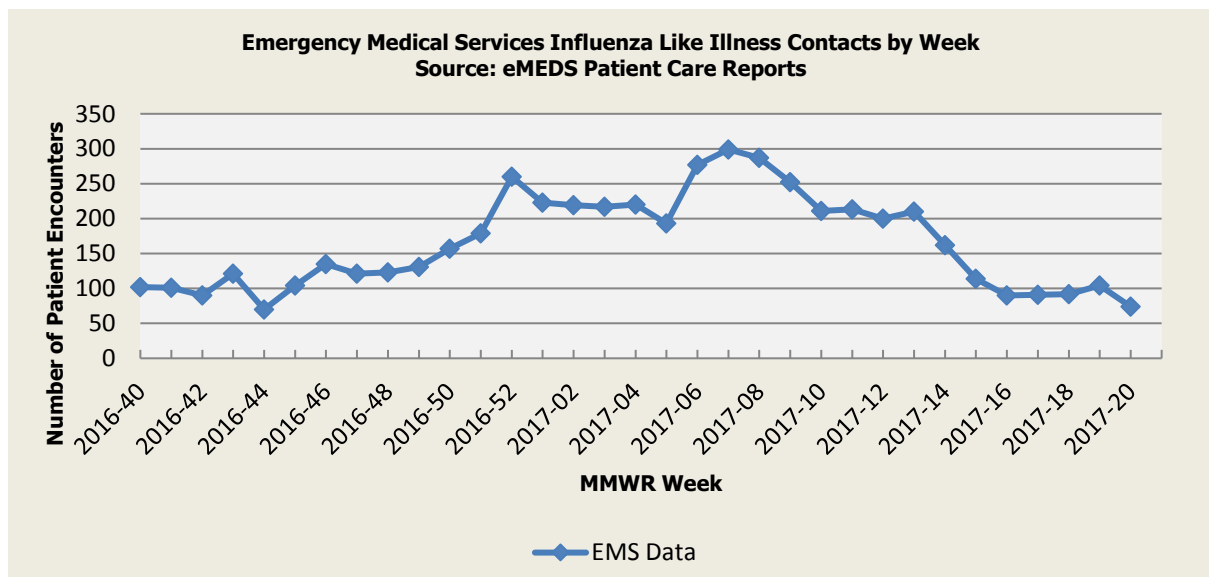
SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 41 through MMWR Week 20 (October through May). Seasonal Influenza activity for Week 20 was: Sporadic Geographic Spread with Minimal Intensity.



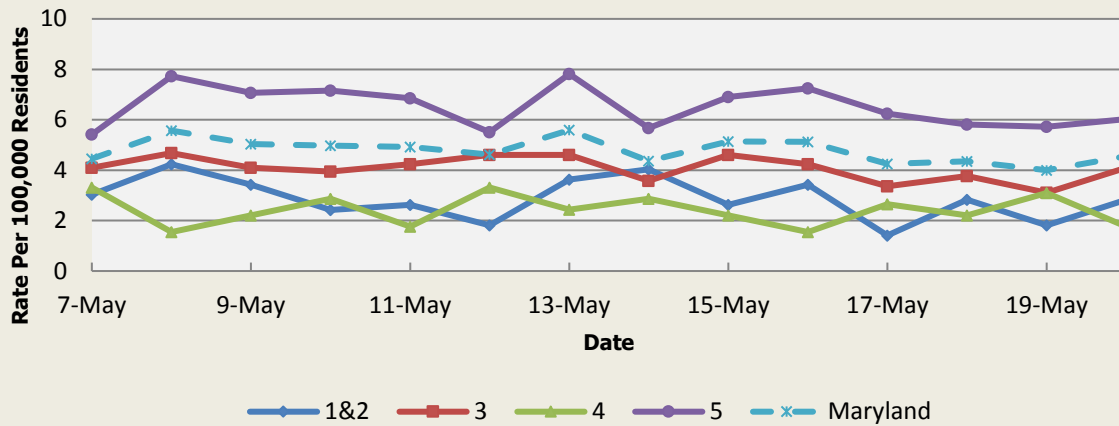
Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	207.15	276.66	253.84	239.93	255.09
Median Rate*	7.66	9.63	9.05	8.51	9.00

* Per 100,000 Residents



Disclaimer on eMEDS flu related data: These data are based on EMS Pre-hospital care reports where the EMS provider has selected "flu like illness" as a primary or secondary impression of a patient's illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. These data are reported for trending purposes only.

Over-the-Counter Medication Sales Related to Influenza Rate Per 100,000 Residents

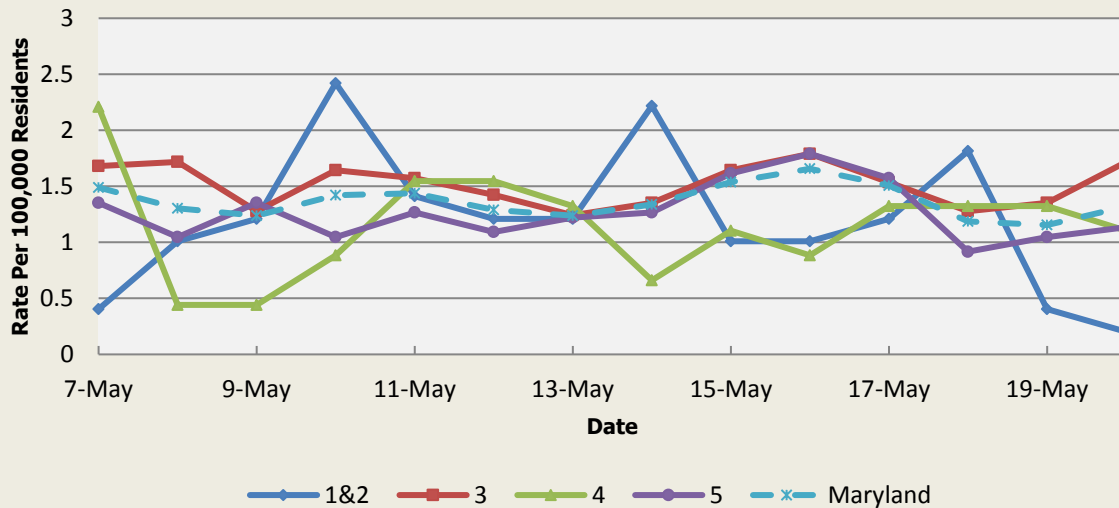


There was not an appreciable increase above baseline in the rate of OTC medication sales during this reporting period.

OTC Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.77	4.91	2.73	8.45	6.01
Median Rate*	3.23	4.38	2.43	8.03	5.52

* Per 100,000 Residents

Over-the-Counter Thermometer Sales Rate Per 100,000 Residents



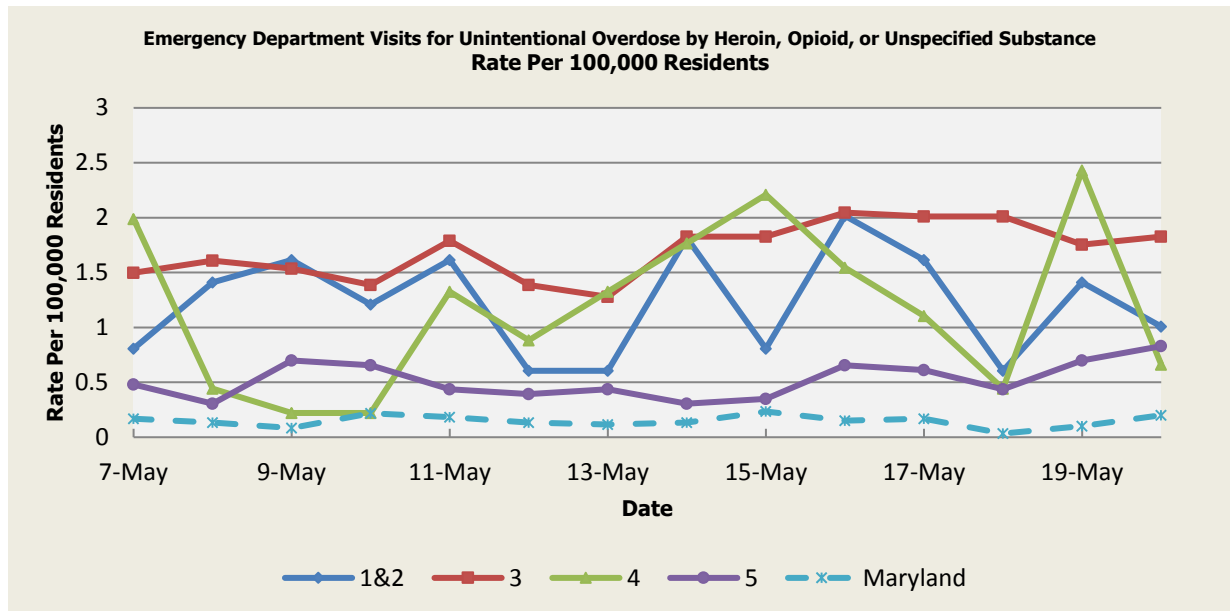
There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

Thermometer Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.37	3.23	2.50	4.32	3.61
Median Rate*	3.02	3.03	2.43	4.06	3.36

* Per 100,000 Residents

SYNDROMIC OVERDOSE SURVEILLANCE

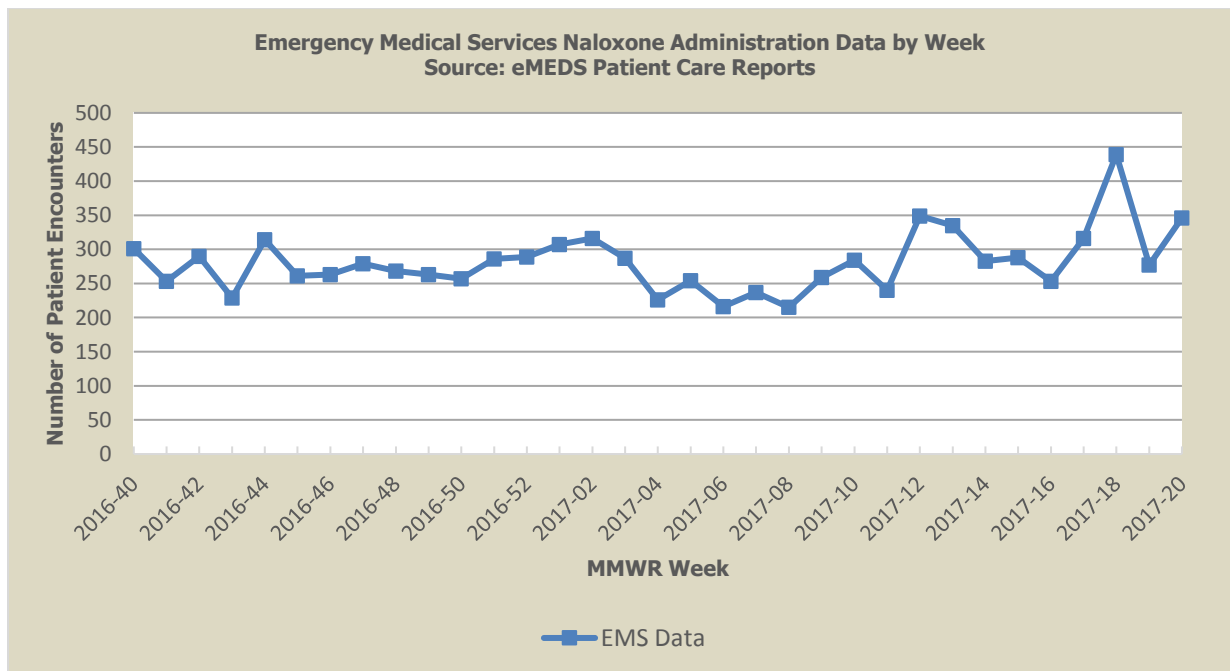
The purpose of this section is to characterize non-fatal ED visit trends for acute unintentional overdose by Heroin, Opioid or Unspecified substance among Maryland residents captured by ESSENCE data, including chief complaint and discharge diagnosis. ED visits that are identified as unintentional overdose by Heroin, Opioid or Unspecified substance include those with medical and non-medical use of a prescription Opioid or where the substance is not specified, given evidence that the majority of fatal overdoses are Opioid-related.



Disclaimer on ESSENCE Overdose related data: ESSENCE chief complaint and discharge diagnosis query for overdose-related illness includes but is not limited to the following terms: heroin, opioid, speedball, dope, fentanyl, naloxone, narcan, and overdose.

Non-fatal Overdose ED Visit Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.33	0.42	0.37	0.15	0.30
Median Rate*	1.01	1.32	1.10	0.48	0.99

* Per 100,000 Residents



Disclaimer on eMEDS naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. Presently, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national, and global levels are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of May 16, 2017, the WHO-confirmed global total (2003-2017) of human cases of H5N1 avian influenza virus infection stands at 859, of which 453 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

AVIAN INFLUENZA:

AVIAN INFLUENZA (CONGO DEMOCRATIC REPUBLIC), 20 May 2017, According to veterinary officer in Ituri province Benon Mando, the governor of the province has officially declared the epidemic of the viral infection in the localities of Joo and Kafe on the shores of Lake Albert. Bird flu, also known as avian flu, is a viral infection, which spreads from bird to bird. Some time back, a particularly deadly strain of bird flu H5N1 continued to spread among poultry populations in North Africa and in certain parts of Asia. Read More: <https://www.promedmail.org/post/5050700>

LPAI H7 (LIBYA), 23 May 2017, As part of general surveillance carried out for avian influenza in the whole country under FAO project, samples from domestic poultry farms were collected by the monitoring teams in the Western Mountains, about 97 samples of different mountain regions. One sample was positive in Abuzian area. Migratory birds were seen a month ago in the area. Read More: <https://www.promedmail.org/post/5055961>

HUMAN AVIAN INFLUENZA:

H7N9 AVIAN INFLUENZA (CHINA), 23 May 2017, China will shutter poultry markets in a district of southwestern Sichuan province after a man fell ill with the H7N9 bird flu, state-owned China News Service reported on Sunday 21 May 2017. The 44-year-old man sold live poultry at a farmers market, China News reported, citing officials in Zigong city. Read More: <https://www.promedmail.org/post/5052589>

NATIONAL DISEASE REPORTS

CANDIDA AURIS, DRUG RESISTANCE (USA) 19 May 2017, As of mid-May 2017, a total of 77 clinical cases of *Candida auris* in U.S. health care facilities were reported to the CDC, according to a report in MMWR. The agency 1st warned about the often multidrug-resistant fungus in June 2016. Of the 77 cases, 53 occurred in New York, 16 in New Jersey, and the rest in Illinois, Indiana, Maryland, Massachusetts, and Oklahoma. All cases were found on cultures during routine patient care. Screening for colonization of close contacts -- usually patients on the same ward -- revealed an additional 45 patients from whom *C. auris* was isolated. The fungus was also isolated from patients' mattresses, windowsills, chairs, and countertops. Read More: <https://www.promedmail.org/post/5050111>

WEST NILE VIRUS (MICHIGAN) 22 May 2017, Health experts confirmed the discovery of 3 birds that tested positive for West Nile virus in Michigan -- the earliest detection of the virus in the past

decade. The 1st detection of positive birds in the state this early into the year indicates a higher risk for human West Nile cases later in the summer, said Ned Walker, a researcher of mosquito-borne diseases at Michigan State University. "Early bird positive means early season transmission activity and heightened early seasonal risk," Walker said. "More virus early, more human cases later." Read More: <https://www.promedmail.org/post/5054917>

ANTIBIOTIC RESISTANCE (TEXAS), 22 May 2017, A dangerous strain of antibiotic-resistant bacteria is far more common in Houston than anyone knew and shows signs it can spread prolifically. It's a specific strain of bacteria known as *Klebsiella pneumoniae*. The superbug is showing a special talent for picking up genes that give it the ability to resist a broad range of antibiotics. It causes very serious infection in hospitalized patients. What was discovered, surprisingly, is one of the major strains causing infection in our patients in Houston is genetically distinct from strains of this same germ causing human infections elsewhere in the United States. Read More: <https://www.promedmail.org/post/5055025>

ROCKY MOUNTAIN SPOTTED FEVER (CALIFORNIA), 24 May 2017, The Baja California State Health Secretariat has confirmed 3 new deaths from rickettsiosis. They are a girl of 1 year and 4 months, resident of Nuevo León in Mexicali, a young girl of 16, and a man of 59, both originating from Ensenada. Guillermo Trejo Dozal, head of the unit, also reported the case of another 55-year-old man living in Nuevo León, who remains at the General Hospital of Mexicali, where he is stable. With these, there are now 6 deaths due to rickettsiosis and 12 confirmed cases -- 8 in Mexicali, 1 in Tijuana, 2 in Ensenada, and another in Vicente Guerrero. Read More: <https://www.promedmail.org/post/5061586>

BOTULISM (CALIFORNIA), 25 May 2017, The country's foremost researchers on botulism in dairy products are calling the recent [botulism] outbreak at a gas station in Walnut Grove a "perfect storm" of circumstances that left one dead and 9 sickened.

"Botulism in cheese products, including processed cheese, is extremely rare," said Eric Johnson, professor in the department of bacteriology at the Botulinum Toxins Laboratory at the University of Wisconsin. "Outbreaks of botulism in commercially processed cheese during the past 50 years is extremely rare and can be counted on the fingers of one hand". Although extremely rare, Northern California has seen 2 deaths from foodborne botulism in the last few months. Within the last month, Napa County has had 1 death from botulism related to canned goods, according to county health officials. Since 1950, the USA has seen 3 instances of human botulism outbreaks due to dairy products. In all, 46 people were affected and 2 died. The most recent was in 1993 where a commercially canned cheese sauce was contaminated after it left the factory and sickened 8 people, killing one. Read More: <https://www.promedmail.org/post/5060186>

INTERNATIONAL DISEASE REPORTS

HEPATITIS A (UK) 20 May 2017, The number of confirmed cases of hepatitis A linked to a bakery in North Lanarkshire has increased to 61. Health officials have urged the public to be on the lookout for symptoms of the infection, especially people living in Airdrie and Coatbridge. The outbreak has been linked to products sold by the JB Christie bakery in Airdrie. Hepatitis A is a viral infection that leads to inflammation of the liver and can cause mild to severe illness. Read More: <https://www.promedmail.org/post/5050696>

UNDIAGNOSED ILLNESS (ZIMBABWE) 21 May 2017, Close to 50 people from Change, Dinde and Nekabandama in Hwange District, Matabeleland North have since the beginning of May 2017 been hospitalized at Lukosi Hospital and surrounding health institutions complaining of severe pain which causes paralysis of the backbone, lower and upper body rendering patients immobile. However, although no deaths have been reported in the area, health officials said they are failing to detect what the disease was or its causes after all patients tested negative for malaria which they were initially suspecting. Apart from the mystery of the disease, local people are now suspecting that there could be some poisonous plant or water source, as during the same time at least 15 cattle died under mysterious circumstances. Read More: <https://www.promedmail.org/post/5052242>

HANTAVIRUS (CHILE) 21 May 2017, A 67-year-old man from the Puyehue community in Osorno province was taken to the after having had health problems on Thursday afternoon. Various signs of illness led the family of the affected individual to accompany him to the health facility in Entre Lagos, where it was determined by rapid test that the symptoms corresponded to a hantavirus infection, a hantavirus cardiopulmonary syndrome that is transmitted from the long-tailed rat to human. Read More: <https://www.promedmail.org/post/5051260>

CHIKUNGUNYA (PAKISTAN) 22 May 2017, As many as 627 Chikungunya suspected cases have been reported in Karachi since 1 May 2017, to date, taking the patients toll to 2722 in the city since 1 Jan 2017. As per statistics released by the Sindh Health Department, at least 627 more suspected chikungunya cases have been surfaced in the city from 1 to 19 May 2017 out of which 343 were reported from Malir, 188 from District West, 42 from District Central, 24 from District South, 23 from District East and 7 from District Korangi, respectively. A total 198 tested positive out of 237 blood samples sent to the National Institute of Health, Islamabad for investigation. Read More: <https://www.promedmail.org/post/5052540>

MERS-COV (SAUDI ARABIA) 24 May 2017, The Ministry of Public Health (MOPH) has announced that a new Middle East Respiratory Syndrome Corona Virus (MERS-CoV) case has been confirmed for a 29-year-old, resident in Qatar, marking the 3rd MERS-CoV case to be confirmed in the country this year and bringing the cumulative number of confirmed MERS-CoV cases since 2012 to 21 cases among whom 7 have died. Read More: <https://www.promedmail.org/post/5059234>

SALMONELLOSIS (AUSTRALIA) 24 May 2017, A playground on the northern beaches has been closed after 2 children became sick with salmonella after playing in the sandpit. The young children caught the infection, which is believed to be spread by contact with bandicoot droppings. Northern Sydney Local Health District director of public health Dr Michael Staff said he hoped to have contained the outbreak by advising the council to close the park quickly. Dr Staff said he believed they contracted the illness through ingesting contaminated sand. Read More: <https://www.promedmail.org/post/5059025>

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.dhmm.maryland.gov/> or follow us on Facebook at www.facebook.com/MarylandOPR.

More data and information on influenza can be found on the DHMM website:
<http://phpa.dhmm.maryland.gov/influenza/fluwatch/Pages/Home.aspx>

Please participate in the Maryland Resident Influenza Tracking System (MRITS): <http://flusurvey.dhmm.maryland.gov>

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE
Regions 1 & 2	Allegany County Frederick County Garrett County Washington County
Region 3	Anne Arundel County Baltimore City Baltimore County Carroll County Harford County Howard County
Region 4	Caroline County Cecil County Dorchester County Kent County Queen Anne's County Somerset County Talbot County Wicomico County Worcester County
Region 5	Calvert County Charles County Montgomery County Prince George's County St. Mary's County

